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Substitute for form 1449/PTO		Complete if Known	
		Application Number	10-657,610
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Filing Date	
		First Named Inventor	JIANG et al.
		Art Unit	
		Examiner Name	
Sheet	1	of	2
		Attorney Docket Number	M03A224

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JW	1	US- 4 492 769	01-08-1985	Blanchard et al.	
JW	2	US- 4 680 282	07-14-1987	Blanchard et al.	
JW	3	US- 5 013 705	05-07-1991	Koberstein et al.	
JW	4	US- 5 965 481	10-12-1999	Durand et al.	
JW	5	US- 5 023 276	06-11-1991	Yarrington et al.	
JW	6	US- 2001/0041159	11-15-2001	Tamhankar et al.	
JW	7	US- 6 051 162	04-18-2000	Van den Sype	
JW	8	US- 5 510 056	04-23-1996	Jacobs et al.	
JW	9	US- 5 658 497	08-19-1997	Kumar et al.	
JW	10	US- 4 048 091	09-13-1997	Barnaba	
JW	11	US- 5 856 585	01-05-1999	Sanfilippo et al.	
JW	12	US- 4 522 894	06-11-1985	Hwang et al.	
JW	13	US- 4 844 837	07-04-1989	Heck et al.	
JW	14	US- 4 897 253	01-30-1990	Jenkins	
JW	15	US- 5 368 835	11-29-1994	Choudhary et al.	
JW	16	US- 5 441 581	08-15-1995	Van den Sype et al.	
JW	17	US- 5 883 138	03-16-1999	Hershkowitz et al.	
JW	18	US- 5 976 721	11-02-1999	Limaye	
JW	19	US- 5 639 401	06-17-1997	Jacobs et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
JW	20	EP 1 134 188 A2	09-19-2001	The BOC Group		
JW	21	EP 0 524 643 A1	01-27-1993	Coming Inc.		
JW	22	EP 0 781 591 A2	07-02-1997	ICT Co., Ltd.		
JW	23	EP 0 548 679 A1	06-30-1993	Idemitsu Kosan		
JW	24	EP 0 640 561 A1	03-01-1995	Shell Internationale		

Examiner Signature	Timothy Vanoy	Date Considered	NOV 2 2005
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Jav	25	US- 5 785 774	07/28/1998	Van den Sype et al.	
Jav	26	US- 5 658 497	08-19-1997	Kumar et al.	
Jav	27	US- 5 648 582	07-15-1997	Schmidt et al.	
		US-			
Jav	28	US- 5 580 536	12-03-1996	Yao et al.	
Jav	29	US- 5 232 889	08-03-1993	Blanchard et al.	
Jav	30	US- 4 537 873	08-27-1985	Kato et al.	
Jav	31	US- 4 927 799	05-22-1990	Matsumoto et al.	
Jav	32	US- 6 329 434 B1	12-11-2001	Wen et al.	
Jav	33	US- 6 458 334 B1	10-01-2002	Tamhankar et al.	
Jav	34	US- 5 431 855	07-11-1995	Green et al.	
Jav	35	US- 5 500 149	03-19-1996	Green et al.	
Jav	36	US- 6 254 807 B1	07-03-2001	Schmidt et al.	
Jav	37	US- 6 455 597 B2	09-24-2002	Hohn et al.	
		US-			
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		Country Code ² Number ³ Kind Code ⁴ (if known)				
Jav	38	GB 1399137	06-25-1975	Ward		
Jav	39	WO 99/48805	09-30-1999	Carpenter		
Jav	40	EP 0 303 438 A2	02-15-1989	Davy McKee Corp.		
Jav	41	JP 11-342334 A	12-14-99	Nippon Shokubai		
Jav	42	WO 93/01130	01-21-93	Bhattacharya		
Jav	43	WO 98/35908	08-20-98	Jacobs		

Examiner Signature	Timothy Vanooy	Date Considered	Nov 2 2005
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Jav	1	SINTERED CERIA: A NEW DENSE AND FINE GRAINED CERAMIC MATERIAL by J.F. Baumard, C. Gault and A. Argoitia; Journal of the Less-Common Metals, 127 (1987) 125-130	
Jav	2	"A Comparative Study of Oxygen Storage Capacity Over Ce _{0.6} Zr _{0.4} O ₂ Mixed Oxides Investigated by Temperature-Programmed Reduction and Dynamic OSC Measurements," Hickey et al., Catalysis Letters, Vol. 72, No. 102, pp. 45-50 (2001)	
Jav	3	"Effect of Ceria Structure on Oxygen Migration for Rh/Ceria Catalysts," by Cordatos et al., J. Phys. Chem., 100, 785-789 (1996)	
Jav	4	"Tape Cast Solid Oxide Fuel Cells for the Direct Oxidation of Hydrocarbons," Park et al., Journal of the Electrochemical Society, 148 (5), pp. A443-A447 (2002)	
Jav	5	"Catalytic Partial Oxidation of Methane to Synthesis Gas Over Ni-CeO ₂ ," Zhu et al., Applied Catalysis A: General 208, pp. 403-417 (2001)	
Jav	6	"Catalytic Partial-Oxidation of Methane on a Ceria-Supported Platinum Catalyst for Application in Fuel Cell Electric Vehicles," Pino et al., Applied Catalysis A: General 225, pp. 63-75 (2002)	
Jav	7	K. Otsuka, T. Ushiyama and I. Yamanaka, "Partial Oxidation of Methane Using the Redox of Cerium Oxide," CHEMISTRY LETTERS, pp. 1517-1520, 1993	
Jav	8	E.S. Putna, J. Stubenrauch, J.M. Vohs, and R. J. Gorte, "Ceria-Based Anodes for the Direct Oxidation of Methane in Solid Oxide Fuel Cells," LANGMUIR, Vol. 11, No. 12, 1995, pp. 4832-4837	

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